

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Page 2

Please insert the following paragraph on page2 between lines 22 and 23 as follows:

Turbo Coded Hybrid Type II ARQ System" Master's thesis, Chalmers University of Technology, School of Electrical and Computer Engineering, 2002".

Page 6

Please amend the Specification on page 6 beginning at line 6 as follows:

A parity-check matrix $H_{R(L)}$ for the LDPC codes according to an embodiment of the present invention can be configured to be generated either in a communication device according to set parameters, or by the other control device (for example, a calculator) outside the communication device. When the parity-check matrix $H_{R(L)}$ is generated outside the communication device, the generated parity-check matrix $H_{R(L)}$ is stored in the communication device. In the following embodiment, an instance of generating the parity-check matrix $H_{R(L)}$ in the communication device will be explained. It is noted that $R(L)$ denotes a coding rate, where $L=1, 2, 3, \dots, \max (0 < R(1) < R(1) \underline{R(1)} < \underline{R(2)} < \dots < R(\max-1) < R(\max)=1)$. $R(\max)$ means non-coding.

Page 8

Please amend the Specification on page 8 beginning at line 23 as follows:

Fig. 4 is a flowchart of the method for constructing the parity-check matrix for Irregular-LDPC codes based on the finite affine geometry. The parity-check matrix for Irregular-LDPC codes will be simply ~~referred to as "parity check codes~~ to referred to as "parity-check matrix" hereinafter.